Table 1 - Sampling and Analysis Plan Summary
Willow Street / Hawthorne Avenue Station OU
1640 North Kingsbury Street, Chicago, Illinois
USEPA ILD982074783 / Illinois EPA 0316005885

Sample Type/Location	Proposed Number Samples[1]	Matrix / Laboratory	Parameter	Method	Estimated Sample Quantity	Field Duplicates[3] (1 extra volume)	MS/MSD[4] (2 extra volumes)	Equipment Blanks[5]	TOTAL[5]	Estimated No. of Containers Needed	Container Type	Minimum Volume	Preservation (Cool to 4° ± 2°C All Samples unless 'None' indicated)	Holding Time from Sample Date
Surface Soil (Human health risk assessment and Feasibility Study)	25 (up to 1surface samples per probe/boring)	solid fixed	PVOCs	5035/8260B	up to 25	2	2	--	up to 29	29 sets	5 g Encores (3/sample)	15 g	--	14 days
			PAHs/Phenols[7]	8270C or 8270/SIM	up to 25	2	2	--	up to29	29	Glass Jar	8 oz	--	14/40 days
			Metals[8]	6020A/7471A	up to 25	2	2	--	up to 29					6 mo./ 28 days for Hg
			Total Cyanide	9012A	up to 25	2	2	--	up to 29					14 days
			PCBs	8081	up to 25	2	2		up to 29					14/40 days
	Additional QA/QC for Soil Samples	liquid fixed	PVOCs	5030B/8260B	--	--	--	5	5	5 sets	Glass Vial	3-40 mL	HCl to pH<2, Zero Headspace	14 days
			PAHs/Phenols[7]	8270C or 8270/SIM	--	--	--	5	5	5	Amber Glass	2-1 L	--	7/40 days
			Metals[8]	6020A	--	--	--	5	5	5	Plastic	500 mL	HNO3 to pH <2	6 mo./ 28 days for Hg
			Total Cyanide	9012A				5	5	5	Plastic	250 mL	NaOH to pH > 12	14 days
			PCBs	8081	--	--	--	5	5	5	Glass	2 - 1 L	--	14/40 days
Subsurface Soil (Human health risk assessment and Feasibility Study)	25 (up to 2 subsurface samples per probe/boring)	solid fixed	PVOCs	5035/8260B	up to 50	3	3	--	up to 56	56 sets	5 g Encores (3/sample)	15 g	--	14 days
			PAHs/Phenols[7]	8270C or 8270/SIM	up to 50	3	3	--	up to 56	56	Glass Jar	8 oz	--	14/40 days
			Metals[8]	6010B/6020A/7470A	up to 50	3	3	--	up to 56					6 mo./ 28 days for Hg
			Total Cyanide	9012A	up to 50	3	3	--	up to 56					14 days
			PCBs	8081	up to 50	3	3		up to 56					14/40 days
	Additional QA/QC for Soil Samples	liquid fixed	PVOCs	5030B/8260B	--	--	--	5	5	5 sets	Glass Vial	3-40 mL	HCl to pH<2, Zero Headspace	14 days
			PAHs/Phenols[7]	8270C or 8270/SIM	--	--	--	5	5	5	Amber Glass	2-1 L	--	7/40 days
			Metals[8]	6020A	--	--	--	5	5	5	Plastic	500 mL	HNO3 to pH <2	6 mo./ 28 days for Hg
			Total Cyanide	9012A				5	5	5	Plastic	250 mL	NaOH to pH > 12	14 days
			PCBs	8081	--	--	--	5	5	5	Glass	2 - 1 L	--	14/40 days
Subsurface Soil - Geotechnical (Soil Vapor Assessment, interior building sample)	up to 3	solid fixed	Grain Size Distribution	ASTM D421/D422	up to 3	--	--	--	up to 3	3	16 oz glass	16 oz	None	--
			Moisture Content	ASTM D2216	up to 3	--	--	--	up to 3				None	--
			Bulk Density	ASTM D2937	up to 3	--	--	--	up to 3	3	Undisturbed Sample from Shelby Tube	Shelby	None	--
			Specific Gravity of Soil Solids	ASTM D854	up to 3	--	--	--	up to 3				None	--
Soil - Waste Characterization	1	solid fixed	Protocol B	Various	1 Composite	--	--	--	1	1	Glass Jar	32 oz	--	varies
Groundwater - wells[2] (Risk Assessment, Feasibility Study, On-going monitoring)	18	liquid fixed	PVOCs	5030B/8260B	18	2	1	9	30	30 sets	Glass Vial	3-40 mL	HCl to pH<2, Zero Headspace	14 days
			PAHs/Phenols[7]	8270C or 8270/SIM	18	2	1	--	21	21	Amber Glass	2-1 L	--	7/40 days
			Metals[8]	6020A/7470A	18	2	1	--	21	21	Plastic	500 mL	HNO3 to pH <2	6 mo./ 28 days for Hg
			Total Cyanide	9012A	18	2	1	--	21	21	Plastic	250 mL	NaOH to pH > 12	14 days
			GW Field Parameters[9]	Field	18	--	--	--	18	--	Field Measured	--	--	--
Water - Waste Characterization	1	solid fixed	Code B - CID Bio	Various	1	--	--	--	1	1	Glass Jar	32 oz	--	varies
Surface Water	8	liquid fixed	PVOCs	8021B or 8260B	8	1	1	0	10	12 sets	Glass Vial	2-40 mL	HCl to pH<2, Zero Headspace	14 days
			PAHs/Phenols[7]	8270C or 8270-SIM	8	1	1	0	10	12	Amber Glass	2-1 L	--	7/40 days
			Dissolved Metals[11]	6020 or 7470A	8	1	1	0	10	12	Plastic	500 mL	HNO3 to pH <2	6 mo./ 28 days for Hg
			Available Cyanide	OIA-1677	8	1	1	0	10	12	Amber Glass	500 mL	PbCO3; NaOH to pH>12	14 days
			Hardness	6020	8	1	1	0	10	12	Plastic	500 mL	HNO3 to pH <2	28 days
			Field Parameters[12]	Field	8	0	0	0	8	--	field measured	--	--	--
Sediment	80	solid fixed	PVOCs	8021 or 8260B	80	8	8	--	96	176	Glass	4 oz	methanol	14 days
			PAHs/Phenols[7]	8270C or 8270-SIM	80	8	8	--	96	132	Amber Glass	8 oz	--	14/40 days
			34 PAHs[13]	8270C or 8270-SIM	20	2	2	--	24	56	Amber Glass	8 oz	--	14/40 days
			Metals[12]	6020A or 7471A	80	8	8	--	96	176	Plastic	125 mL	--	6 mo./ 28 days for Hg
			Percent Solids	Various	80	8	8	--	96	176	Glass	4 oz	keep in dark	28 days
			Cyanide	9012A	80	8	8	--	96	176	Plastic	125 mL	--	14 days
			Forensic Fingerprinting	8270M	10	2	2	--	14	34	Amber Glass	8 oz	--	14/40 days
			Total Organic Carbon	Lloyd Kahn Method	80	8	8	--	96	176	Plastic	100 g	keep in dark	28 days
			Black Carbon[13]	Refer to Note 13	20	2	2	--	24	34	Plastic	500 g	keep in dark	28 days
			Toxicity Testing[14]	Refer to Note 14	10	0	0	--	10	12	Plastic	2 L	keep in dark	--
			Ammonia	350.1	20	2	2	--	24	44	Plastic	10 g	--	28 days
			Total Sulfide	9030	20	2	2	--	24	44	Amber Glass	>25 g	Zero Headspace	7 days
	Additional QA/QC for Sediment Samples	liquid fixed	PVOCs	8021B or 8260B	--	--	--	5	5	5	Glass Vial	2-40 mL	HCl to pH<2, Zero Headspace	14 days
			PAHs/Phenols[7]	8270C or 8270-SIM	--	--	--	5	5	4	Amber Glass	2-1 L	--	7/40 days
			34 PAHs[10]		--	--	--	5	5	5	Amber Glass	8 oz	--	14/40 days
			Metals[12]	6020 or 7470B	--	--	--	5	5	4	Plastic	500 mL	HNO3 to pH <2	6 mo./ 28 days for Hg
			Cyanide	9012A	--	--	--	5	5	4	Plastic	250 mL	NaOH to pH > 12	14 days
			Ammonia	350.1	--	--	--	1	1	1	Plastic	500 mL	H2SO4 to pH < 2	28 days

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1640 North Kingsbury Street, Chicago, Illinois
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Sample Type/Location	Proposed Number Samples[1]	Matrix / Laboratory	Parameter	Method	Estimated Sample Quantity	Field Duplicates[3] (1 extra volume)	MS/MSD[4] (2 extra volumes)	Equipment Blanks[5]	TOTAL[5]	Estimated No. of Containers Needed	Container Type	Minimum Volume	Preservation (Cool to 4° ± 2°C All Samples unless 'None' indicated)	Holding Time from Sample Date
			Total Sulfide	9030	--	--	--	1	1	1	Amber Glass	500 mL	NAOH & ZnOAc to pH > 9	7 days
Sediment (FS Parameters)	12	solid fixed	Grain Size Distribution	ASTM D421, 422	10	0	0	0	10	10	5 Gallon Bucket	5 gal	None	--
			Atterberg Limits	ASTM D4318	10	0	0	0	10	10	Glass or Plastic	8 oz	None	--
			Organic Content	ASTM D2974	10	0	0	0	10	10	Plastic	100 g	keep in dark	28 days
			Moisture Content	ASTM D2216	10	0	0	0	10	10	Glass or Plastic	8 oz	None	--

Notes:

1. Proposed number of samples does not include optional investigation locations; soil vapor locations are optional and dependent on field/analytical results and therefore not included on this table.
2. Groundwater monitoring will be quarterly for 1 year following installation of wells.
3. Field duplicates will be collected at a frequency of one per ten or fewer investigative water samples, one per twenty or fewer investigative soil/sediment samples and one duplicate sample per ten or fewer investigative soil vapor samples.
4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples will be collected at a frequency of one per group of twenty or fewer investigative water samples and twenty or fewer soil samples. Additional volume will be determined per laboratory requirements.
5. Equipment blanks will be collected at a frequency of one per soil sampling day with non-dedicated sampling equipment; analyses will be same as soil sample analyses.
6. Trip blanks will accompany each cooler containing VOC water samples, including equipment blanks; this is an estimate based on number of days sampling and estimation of number of coolers.
7. Phenols include 2, 4-dimethylphenol, 2-methylphenol, 4-methylphenol and phenol (acid-extractable organic compounds).
8. Metals as listed in the Muti-Site RAF plus berylium and thallium; which include the Priority Polutant Metals and aluminum, barium, iron, manganese and vanadium.
9. Field parameters for groundwater include temperature, pH, specific conductivity, oxidation-reduction potential, and dissolved oxygen.
10. PAHs analysis may include a list of 34 PAHs, including chain parameters as provided in USEPA Guidance Procedures for the Derivation of Equilibrium Partitioning Sediment Benchmarks (ESBs) for the Protection of Benthic Organisms: PAH Mixtures, 2002 by SW-846 Method 8270C with gas chromatograph/mass spectrometry in selected ion mode of operation.
11. Metals in surface water and sediment include arsenic, barium, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc
12. Surface water field parameters include temperature, pH, specific conductivity, oxidation-reduction potential, dissolved oxygen, and turbidity.
13. Black Carbon ("Soot" Carbon) is the remaining carbon after muffle furnace drying and acid treatment of sediments to remove other forms of carbon Used to estimate the bioavailable concentration of PAHs in sediment from the "freely-dissolved" chemical in the interstitial water based on USEPA Bioavailability Procedure, 2000, Gustafsson, et al. 1997, and Accardi-Day and Gschwend, 2003.
14. The *Hyalella* (amphipod) 28-day test will be used to evaluate the toxicity of whole sediments. This test will be performed in accordance with USEPA.

Acronyms:

Table 2 - Boring, Probe and Monitoring Well Plan
Willow Street/Hawthorne Avenue Station OU
1640 North Kingsbury Street
USEPA IILD982074759/ Illinois EPA 0316005885

Sample ID	Purpose	Approximate Grade (CCD)	Estimated Water Table (ft bgs)	Soil Sampling				Monitoring Wells Installed/Groundwater Sampling		
				# Surface Soil Samples (0-2 ft bgs)	# Subsurface Soil Samples (>2 ft bgs)	Proposed Depth (ft bgs)*	Soil Parameters+	Total Depth of Well (ft bgs)	10-Foot Screen Interval (ft bgs)**	Groundwater Parameters++
General Iron Parcel										
MW101	Evaluation of post-remediation conditions upgradient and downgradient of former MGP structures	6.30	5-12	--	--	20	--	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
MW102		6.30	5-12	--	--	20	--	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
MW103		6.30	5-12	--	--	20	--	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
MW104		6.30	5-12	--	--	20	--	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
MW105		6.30	5-12	--	--	20	--	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
AFS/Finkl Parcel										
MW106	Upgradient from former gas holder and to evaluate post-remediation conditions on the property	9.50	12-15	--	--	20	--	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
ComEd Parcel										
MW108	Evaluate potential residual MGP impacts adjacent to former MGP structures	No previous data - estimate 9.50	No previous data - estimate 12-15	1	1	20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
MW109				1	1	20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
MW110				1	1	20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
MW111				1	1	20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
SB101	Evaluate potential residual MGP impacts adjacent to former MGP structures			1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB102				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB103				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB014				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB105				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--

Notes:
1) * Depths estimated; drilling will continue until visual, olfactory or PID impacts are not present and native clay is encountered, or refusal is encountered. Samples may be collected where not planned (Ex: MW101) if visual, olfactory or PID impacts are observed.
2) ** 10-foot screens to be installed with the top of screen approximately 2-3 feet above the observed water table interface. Screen intervals are estimated and will change based on actual water table depths observed during drilling. Total well depth will vary based on depth to native clay or potential impacts encountered; if total depth is below bottom of screen, well sand will be used to backfill to depth necessary for proper installation of well screen. 1-foot silt trap to be installed below bottom of screen.
3) + Metals icludes the 13 Priority Polutant Metals plus aluminum, barium, iron, manganese, and vanadium

Table 2 - Boring, Probe and Monitoring Well Plan
Willow Street/Hawthorne Avenue Station OU
1640 North Kingsbury Street
USEPA IILD982074759/ Illinois EPA 0316005885

Sample ID	Purpose	Approximate Grade (CCD)	Estimated Water Table (ft bgs)	Soil Sampling				Total Depth of Well (ft bgs)	10-Foot Screen Interval (ft bgs)**	Groundwater Parameters++
				# Surface Soil Samples (0-2 ft bgs)	# Subsurface Soil Samples (>2 ft bgs)	Proposed Depth (ft bgs)*	Soil Parameters+			
ComEd Parcel (Continued)										
SB106	Evaluate potential residual MGP impacts adjacent to former MGP structures	No previous data - estimate 9.50	No previous data - estimate 12-15	1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB107				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
Peoples Gas Parcel										
MW112	Evaluate conditions adjacent to former MGP structures on ComEd and Marcey Parcels	9.50	5-12	--	--	20	--	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
Marcey Parcel										
MW113	Evaluate conditions upgradient and down gradient of former MGP structures; 1 well to be installed within the former gas holder	No previous data - estimate 9.50	No previous data - estimate 12-15	1	1	20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
MW114				1	1	20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
MW115				1	1	20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
MW116				1	1	20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
MW117				1	1	20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
MW118				--	1	20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
SB115	Evaluate potential residual MGP impacts adjacent to former MGP structures			1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB116				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB117				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB118				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB119				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB120				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--

Notes:

1) * Depths estimated; drilling will continue until visual, olfactory or PID impacts are not present and native clay is encountered, or refusal is encountered. Samples may be collected where not planned (Ex: MW101) if visual, olfactory or PID impacts are observed.
2) ** 10-foot screens to be installed with the top of screen approximately 2-3 feet above the observed water table interface. Screen intervals are estimated and will change based on actual water table depths observed during drilling. Total well depth will vary based on depth to native clay or potential impacts encountered; if total depth is below bottom of screen, well sand will be used to backfill to depth necessary for proper installation of well screen. 1-foot silt trap to be installed below bottom of screen.
3) + Metals icludes the 13 Priority Polutant Metals plus aluminum, barium, iron, manganese, and vanadium

Table 2 - Boring, Probe and Monitoring Well Plan (Continued)
Division Street Station OU
1241 West Division Street
USEPA ILD982074783 / Illinois EPA 0316005885

Sample ID	Purpose	Approximate Grade (CCD)	Estimated Water Table (ft bgs)	Soil Sampling				Total Depth of Well (ft bgs)	10-Foot Screen Interval (ft bgs)**	Groundwater Parameters+
				# Surface Soil Samples (0-2 ft bgs)	# Subsurface Soil Samples (>2 ft bgs)	Proposed Depth (ft bgs)*	Soil Parameters+			
Marcey Parcel (Continued)										
SB121	Evaluate potential residual MGP impacts adjacent to former MGP structures	No previous data - estimate 9.50	No previous data - estimate 12-15	1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB122				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
North Kingsbury Street/Wisconsin Street Borings										
MW107	Evaluate conditions downgradient of former gas holder on ComEd Parcel	No previous data - estimate 9.50	No previous data - estimate 12-15	1	1	20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	20	9-19	PVOCs; PAHs; phenols; metals; and total cyanide.
SB108	Evaluate conditions upgradient and downgradient of former MGP structures on ComEd Parcel			1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB109				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB110				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB111				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB112				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB113	Evaluate conditions downgradient of former MGP structures on Marcey Parcel			1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB114				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB123				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB124				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--
SB125				1	1	10-20	PVOCs; PAHs and Phenols, metals; PCBs and total cyanide.	--	--	--

Notes:
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2) ** 10-foot screens to be installed with the top of screen approximately 2-3 feet above the observed water table interface. Screen intervals are estimated and will change based on actual water table depths observed during drilling. Total well depth will vary based on depth to native clay or potential impacts encountered; if total depth is below bottom of screen, well sand will be used to backfill to depth necessary for proper installation of well screen. 1-foot silt trap to be installed below bottom of screen.
3) + Metals icludes the 13 Priority Polutant Metals plus aluminum, barium, iron, manganese, and vanadium

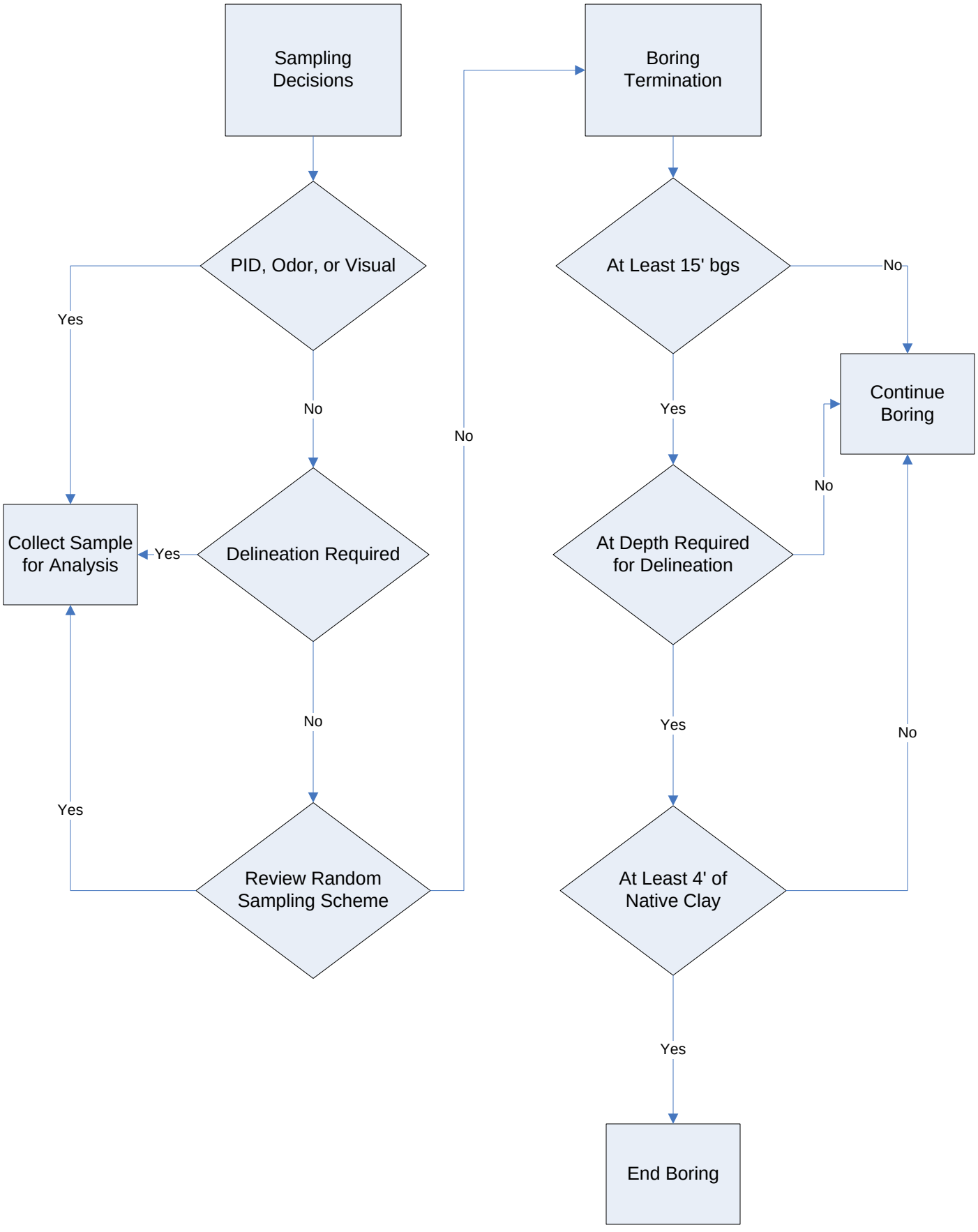

Table 3 – Site-Specific Decision Tree for Soil Borings and Sampling		
Willow Street/Hawthorn Ave. Station OU – SSWP	September 2009	Rev. 0